CLAIMS

1. A process for the installation of pipes in shallow or very shallow water essentially comprising the following steps:

- excavation of a trench used for the positioning/guiding of pipes (""pre-trenching"")
- cleaning and maintenance of the trench in the dragging phases;
- underground insertion of said pipes positioned at the required level (""post-trenching"");

characterized in that said steps are effected by the use of vehicles essentially consisting of:

- a tracked transport vehicle or a vehicle with tyres;
- an autonomous power control module which powers said vehicle, equipped with a cabin for the operator, said module being either supported by the chassis of said vehicle or detached and situated on a floating craft, connected to the vehicle;

said vehicles being assigned to transport one or more items of equipment each having one of the following functions:

"pre-trenching", maintenance of trenches, "post-trenching", so that all the equipment having the above-mentioned functions is present within the whole group of vehicles used.

2. The process according to claim 1, wherein a further step is present, consisting of the dragging of pipes during the positioning of the same, situated after the "pre-trenching" step, and before the trench cleaning and maintenance, the dragging equipment also being present, in this case, within the group of vehicles used.

3. The process according to claim 1, wherein a further step is present, consisting of the covering of the inserted pipes (""back-filling""), situated after the ""post-trenching"", in this case, the ""back-filling"" equipment also being present within the group of vehicles used.

4. The process according to claim 2, wherein at least one of the vehicles is equipped with ""pre-trenching"" equipment and dragging equipment.

5. The process according to claim 2, wherein at least one of the vehicles has trench maintenance equipment and dragging equipment.

6. The process according to claims 2 and 3, wherein at least one of the vehicles has "back-filling" equipment and dragging equipment.

7. The process according to claim 4, wherein the vehicle is equipped with an excavating device and winch.

8. The process according to claim 6, wherein the vehicle is equipped with a cochlea for transferring the filling

material onto the pipe, and a winch.

9. The process according to claim 1, wherein the vehicle with "post-trenching" equipment has a digging unit including milling cutters with suction pumps.

10. The process according to claim 9, wherein the digging unit is assembled on the pipe and is capable of moving on the pipe itself.

11. The process according to claim 10, wherein the autonomous power and control module is detached, situated on a floating craft and connected, through an umbilical duct, to the digging unit assembled on the pipe, capable of moving, the transport vehicle not being present.

12. A system for the installation of pipes in shallow or very shallow water, characterized in that it comprises a single vehicle or more vehicles essentially consisting of:

- a tracked transport vehicle or a vehicle with tyres (C);
- an autonomous power and control module (P) which powers said vehicle, equipped with a cabin for the operator,

  said module being either positioned on the chassis of said vehicle or detached and placed on a floating craft(G), connected to the vehicle through an umbilical duct(O);

said vehicle(s) being assigned to transporting one or more items of equipment each having one of the following functions:

"pre-trenching" (S), trench maintenance (M), "post-trenching" (U),

said equipment, in the case of a single vehicle, being installed and alternatively substituted, according to the operation to be performed, whereas, in the case of more vehicles, said equipment being installed on the vehicles to allow some of the operations to be possibly carried out simultaneously in several points of the pipeline.

13. The system according to claim 12, wherein the dragging equipment (T) and/or the "back-filling" equipment (F) are present in the vehicle(s), said equipment being installed alone or together with one or more of the other equipment for "pre-trenching" (S), trench maintenance (M) or "post-trenching" (U).

14. The system according to claim 13, wherein, in the case of several vehicles, the equipment for "pre-trenching" (S), trench maintenance (M), "post-trenching" (U), dragging (T) and "back-filling" (F) is installed on at least three vehicles.

15. The system according to claim 13, wherein at least one of the vehicles is equipped with "pre-trenching" and

dragging equipment, at least one of the vehicles is equipped with trench maintenance and dragging equipment, at least one of the vehicles is equipped with "back-filling" and dragging equipment, and at least one of the vehicles is equipped with "post-trenching" equipment.

16. The system according to claim 15, wherein at least one of the vehicles is equipped with excavating tools and a winch, at least one of the vehicles is equipped with a cochlea for transferring the filling material onto the pipe, and a winch, and at least one of the vehicles is equipped with a digging unit, comprising milling cutters with suction pumps.

17. The system according to claim 16, wherein the digging unit of the vehicle with the equipment for "post-trenching" is assembled on the pipe and is capable of moving on the pipe itself.

18. The system according to claim 17, wherein the autonomous power and control module is detached, situated on a floating craft and directly connected to the digging unit assembled on the pipe and capable of moving, through an umbilical duct, the transport vehicle not being present.

19. A "post-trenching" vehicle for the installation of pipelines in shallow or very shallow water, character-

ized in that it essentially consists of:

- a digging unit (U), equipped with milling cutters, a roller transport system, which uses the pipe as a guide and, possibly, a suction system;
- a possible tracked transport vehicle (C) or a vehicle with tyres, situated at the side of the digging unit and connected to the same through an umbilical duct (O);
- an autonomous power and control module (P), equipped with an operator's cabin, which powers said vehicle, said module, when the vehicle is present, being positioned on the chassis of the vehicle itself, otherwise detached and placed on a floating craft (G), and connected to the digging unit through an umbilical duct (O).